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UNIVERSITY OF VIRGINIA
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Virginia Annual Gross State Product, 1958-1984

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This report presents estimates for Virginia gross state product (GSP) over the 1958-1984 time period. Latest in an annual series, this report provides information for 1984 and revisions for previous years.

Gross state product is the term applied to the value of all final goods and services produced in a state in a given year.[1] For purposes of comparison, one can assume GSP to be the state's equivalent of gross national product (GNP). However, since data are lacking for all income earned by Virginia residents outside the state, and for all income earned within Virginia by nonresidents, GSP more closely resembles the gross domestic product (GDP), a measure of output produced within the boundaries of the nation. Since GNP and GDP are nearly identical in the United States, gross state product is usually compared to GNP.[2]

Virginia gross state product in current dollars (unadjusted for inflation) rose to almost $87 billion in 1984 (see Table 1), which showed a rise of more than $9.6 billion over 1983. In the 1958-1984 period, GSP increased at an annual rate of 9.4 percent.[3] During this same period, GNP in current dollars rose an annual average of 8.3 percent. From 1983 to 1984, GSP grew 12.5 percent, greater than the 10.8 percent rise in GNP.

Virginia GSP in constant 1972 dollars (gross state product converted to a constant purchasing power based on 1972 dollars) grew from $12.5 billion in 1958 to $38.9 billion in 1984 (see Table 2). This represented an average annual growth of 4.3 percent over the time period (see Figure 1). GNP increased by an average of 3.3 percent over the same period. Except for the recessions of 1969-1970 and 1974-1975, Virginia experienced steady growth. From 1983 to 1984, real GSP grew a sharp 8.0 percent, higher than the 6.8 rise in real GNP.

Virginia's current dollar GSP as a percent of GNP is shown in Figure 2. When the rate of growth of GSP exceeds that of GNP, Virginia's share of GNP increases. Since 1958, the percentage has grown from 1.82 percent to 2.37 percent in 1984. The constant rise from 1980 to 1984 provides evidence that Virginia has fared better than the nation as a whole during the last two recessions (1980 and 1981-1982).

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1 Some confusion may arise in the reader's mind as to what constitutes a "final good." In this report final good refers to all products that are not used as inputs for other products and to all products exported outside the state.

2 John W. Kendrick and C. Milton Jaycox, "The Concept and Estimation of Gross State Product," *The Southern Economic Journal* 32 (October 1965), pp. 154-155.

3 All growth rates were computed using the least squares method.

Figure 1.
Virginia Gross State Product, 1958-1984 (billions of 1972 dollars)

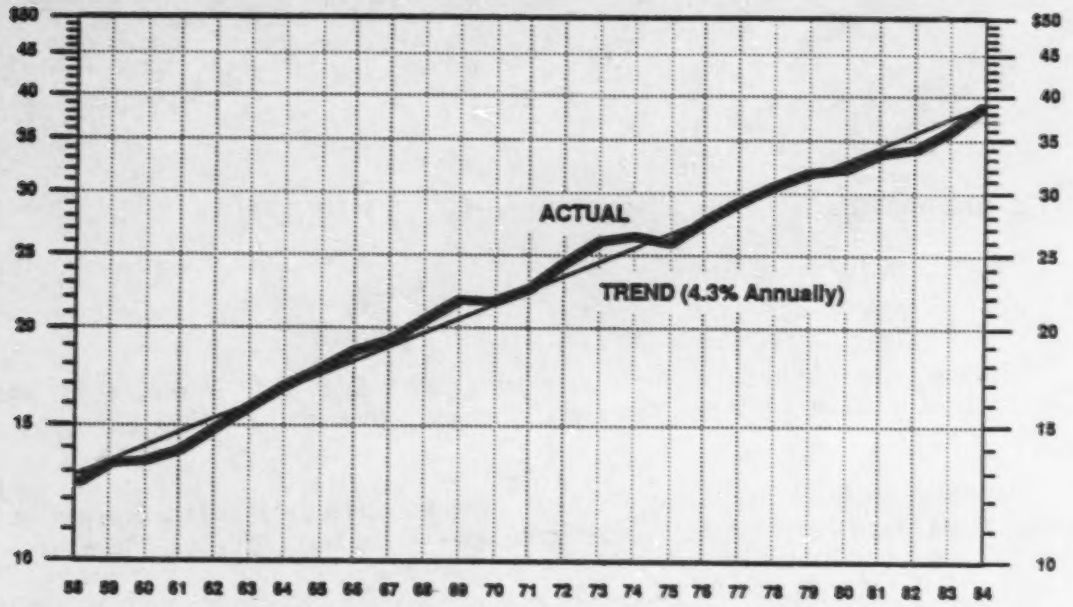


Figure 2.
Virginia GSP as a Percent of GNP, 1958-1984 (current dollars)

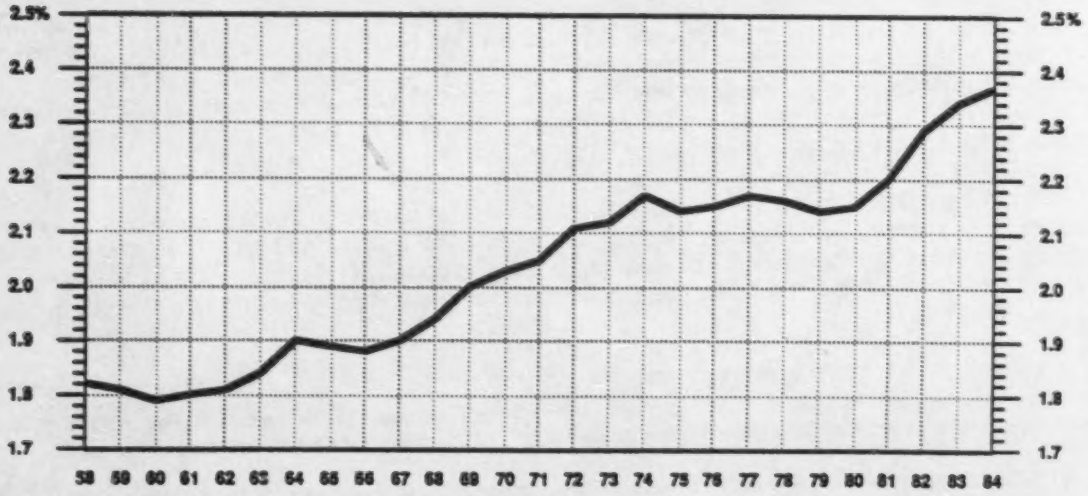
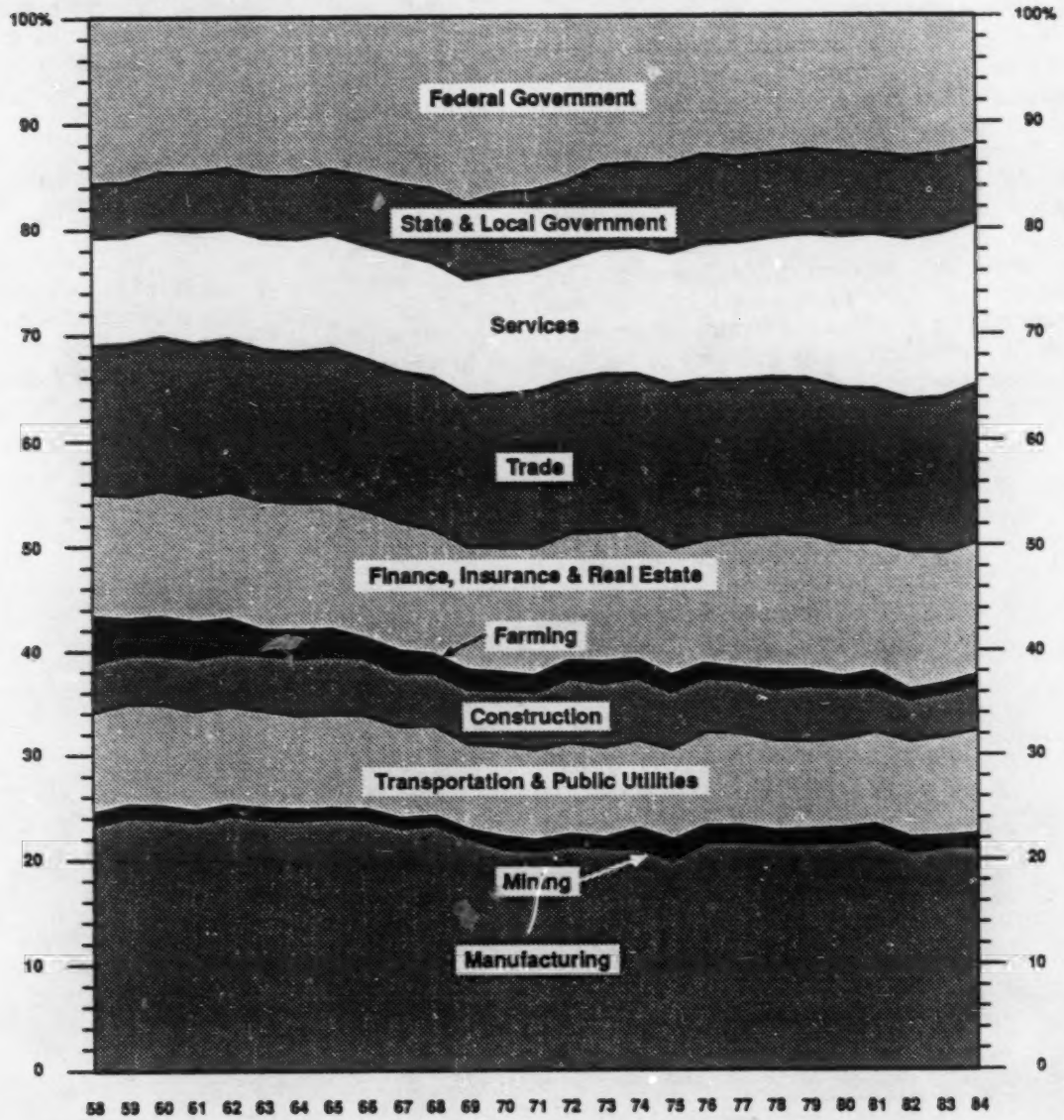


Figure 3.
Industrial Shares of Virginia GSP, 1958-1984 (current dollars)



On an industry-by-industry basis, the relative shares of GSP have been fairly stable for some industries, and have changed dramatically for others (see Figure 3 and Table 3). Construction; finance, insurance, and real estate; mining; wholesale and retail trade; and transportation and public utlilities have maintained a more or less constant share of GSP. Farming has fallen from 4.7 percent in 1958 to only 1.0 percent in 1984. The federal government has also lost about a 3 percentage point share. Manufacturing has fallen from a high of 24.2 percent in 1962 to 21.1 percent in 1984. However, manufacturing's share has remained roughly constant for the last ten years, and it still is

the largest industrial sector in the state. The services sector has experienced long-term growth, as has state and local government. However, state and local government has decreased since the mid 1970's.

Once adjustments are made for inflation, the relative positions of the industrial sectors remain basically the same as when measured in current dollars. Manufacturing; wholesale and retail trade; services; and finance, insurance and real estate have the largest shares of real Virginia GSP, followed by the federal government. Transportation and public utilities, state and local government, construction, farming and mining each contribute less than 10 percent to real GSP.

Per capita gross state product in current dollars stood at $15,428 in 1984, 99.5 percent of per capita GNP (see Table 4). Virginia per capita GSP as a percent of the U.S. has been rising constantly since 1979, and since 1958 is up from 80.6 percent.

Gross farm product, a component of Virginia gross state product, is derived from the U.S. Department of Agriculture's state farm income statistics for Virginia. This is accomplished by subtracting intermediate production expenses from the value of total farm output. Government payments are omitted from the value of farm output. In addition, farm wages are not included as production expenses and therefore are considered part of gross state product. The following table illustrates the computation of Virginia gross farm product for 1984 (current dollars).

Value from total farm output (millions of dollars)	
Cash receipts from marketing	1,794.4
Nonmonetary income	243.9
Other farm income	79.2
Net changes in inventories	-88.5
Subtotal	2,029.0
Less intermediate production expenses	
Feed	328.6
Livestock purchased	47.1
Seed, plants, and bulbs	36.2
Fertilizer and lime	130.8
Repairs/operation of capital items	244.8
Miscellaneous operating expenses	333.2
Subtotal	1,120.7
Gross farm product	908.3

A detailed statement of the methodology used for all industrial sectors is available upon request.

Table 1.
Virginia Gross State Product in Current Dollars, 1958-1984 (millions of dollars)

Year	Total	Construction	Farming	Finance, Insurance, and Real Estate	Federal Government	State and Local Government	Manufacturing	Mining	Services[a]	Trade	Transportation and Public Utilities
1958	8,148.2	380.4	382.6	939.7	1,269.9	425.4	1,891.8	114.5	812.5	1,157.0	774.4
1959	8,816.6	413.6	326.9	1,011.3	1,357.7	453.4	2,119.8	117.9	893.1	1,278.1	844.8
1960	9,035.6	421.8	347.9	1,068.8	1,299.1	494.8	2,156.2	116.1	934.7	1,319.3	877.0
1961	9,437.1	465.3	353.4	1,125.1	1,360.8	536.5	2,228.8	117.9	984.0	1,371.3	894.0
1962	10,206.4	518.1	353.5	1,217.3	1,442.7	593.5	2,473.4	119.4	1,066.7	1,476.8	944.9
1963	10,958.5	593.5	269.9	1,345.3	1,621.8	647.4	2,606.2	131.6	1,166.4	1,568.4	1,008.1
1964	12,055.3	649.7	355.2	1,446.8	1,784.9	721.9	2,855.7	145.1	1,286.4	1,735.3	1,074.4
1965	12,990.4	727.0	353.6	1,567.7	1,843.5	804.9	3,108.4	142.5	1,393.8	1,887.8	1,161.1
1966	14,126.5	768.5	306.9	1,710.5	2,100.3	919.3	3,366.5	154.3	1,524.4	2,022.9	1,253.0
1967	15,133.4	772.9	355.6	1,825.8	2,367.8	1,021.4	3,471.8	160.3	1,659.0	2,176.8	1,322.1
1968	16,863.2	851.3	337.3	1,991.5	2,693.8	1,197.3	3,929.1	169.3	1,834.3	2,434.1	1,425.1
1969	18,689.8	953.8	373.8	2,195.5	3,264.3	1,367.9	4,086.9	178.0	2,042.8	2,696.7	1,530.1
1970	19,925.6	1,057.4	386.5	2,345.7	3,297.1	1,543.1	4,173.9	269.2	2,260.6	2,906.6	1,685.6
1971	21,840.2	1,189.9	383.9	2,642.8	3,558.2	1,670.2	4,516.4	257.2	2,491.5	3,245.8	1,884.3
1972	24,747.4	1,514.9	468.2	2,973.0	3,805.2	1,866.5	5,261.1	286.5	2,824.9	3,617.8	2,129.3
1973	27,679.5	1,651.5	623.2	3,397.8	3,886.2	2,189.3	5,796.9	339.7	3,274.2	4,129.1	2,391.4
1974	30,613.2	1,777.9	627.0	3,736.1	4,184.1	2,467.0	6,388.5	638.2	3,719.3	4,517.7	2,557.3
1975	32,749.8	1,757.1	603.6	3,924.9	4,489.4	2,821.2	6,452.5	710.4	4,099.8	5,061.9	2,829.0
1976	36,997.0	1,881.9	601.5	4,343.9	4,818.5	3,119.1	7,969.5	648.8	4,749.2	5,618.9	3,245.6
1977	41,580.2	2,090.5	558.9	5,214.8	5,489.8	3,351.0	8,932.2	751.4	5,383.1	6,190.0	3,618.6
1978	46,640.3	2,390.8	805.5	6,001.2	6,018.0	3,734.1	9,876.9	741.5	6,144.4	6,943.5	3,984.5
1979	51,832.9	2,724.0	853.1	6,635.7	6,459.3	4,121.5	10,979.2	904.8	7,146.3	7,707.0	4,302.0
1980	56,702.8	2,723.6	696.9	7,163.4	7,176.8	4,556.5	12,104.3	984.9	8,049.6	8,420.2	4,826.6
1981	64,963.3	2,771.0	1,027.8	7,868.7	8,346.3	5,027.8	14,070.3	1,115.9	9,518.9	9,568.4	5,648.3
1982	70.236.8	2,725.0	872.4	9,152.4	9,324.6	5,413.8	14,365.9	1,134.2	10,699.3	10,189.2	6,359.8
1983	77,289.3	3,140.1	750.6	9,583.8	9,907.3	5,857.0	16,230.7	947.3	12,091.2	11,423.1	7,358.3
1984	86,953.0	3,769.6	908.3	10,931.0	10,575.8	6,264.2	18,325.7	1,191.2	13,437.7	12,979.0	8,570.6

Sources: **Earnings:** U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, 65 (August 1985), pp 10, 16 (Table 3); U.S. Department of Commerce, Bureau of Economic Analysis, State Personal Income: 1929-82 (Washington: GPO, 1984), pp. 32-33, 192-193 (Table 8); **National Income:** U.S. Department of Commerce, Bureau of Economic Analysis, unpublished preliminary 1984 estimates. U. S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, 64 (July 1984), p. 70 (Table 6.3 B), 63 (July 1983), p. 69 (Table 6.3B), and 62 (July 1982), p. 79 (Table 6.3B); U.S. Department of Commerce, Bureau of Economic Analysis, The National Income and Product Accounts of the United States, 1926-76 Statistical Tables (Washington: GPO, 1981), pp. 232-233 (Table 6.3B); **Product Accounts:** Unpublished tabulations from the U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Wealth Division; **Manufacturing Adjustment:** U. S. Department of Commerce, Bureau of the Census, 1982 Census of Manufacturers, Vol. 2, U.S. Summary, pp. 4-5; U.S. Department of Commerce, Bureau of the Census, Annual Survey of Manufactures (selected editions). **Agriculture:** U. S. Department of Agriculture, Economic Research Service, Economic Indicators of the Farm Sector: State Income and Balance Sheet Statistics, 1983 (Washington: GPO, 1984); Unpublished revisions and historical cost figures from the U. S. Department of Agriculture, Economic Research Division.

[a]Includes agricultural services, forestry and fisheries, and "rest of the world", which includes operations of foreign governments and international organizations in the United States.

Table 2.
Virginia Gross State Product in Constant Dollars, 1958-1984 (millions of 1972 dollars)

Year	Total	Construction	Farming	Finance, Insurance, and Real Estate	Federal Government	State and Local Government	Manufacturing	Mining	Services[a]	Trade	Transportation and Public Utilities
1958	12,532.4	763.9	511.3	1,406.7	2,834.6	889.9	2,341.3	155.1	1,300.0	1,690.9	992.9
1959	13,324.4	823.9	463.7	1,480.7	2,919.7	912.3	2,569.4	169.1	1,390.0	1,828.8	1,070.8
1960	13,374.1	836.9	496.2	1,531.2	2,764.1	951.6	2,576.0	168.2	1,422.0	1,870.0	1,099.0
1961	13,845.7	903.6	507.0	1,600.4	2,883.1	993.4	2,653.3	173.3	1,452.5	1,908.2	1,106.5
1962	14,728.3	977.6	490.3	1,712.1	2,974.6	1,045.0	2,923.7	182.8	1,531.2	2,049.6	1,158.0
1963	15,735.4	1,083.0	386.4	1,842.9	3,143.0	1,101.0	3,147.5	201.2	1,648.8	2,161.9	1,237.0
1964	16,766.3	1,135.8	524.5	1,942.0	3,275.0	1,193.2	3,449.0	207.6	1,748.5	2,325.8	1,300.7
1965	17,664.6	1,205.6	488.2	2,054.6	3,240.0	1,289.9	3,722.7	213.2	1,818.6	2,507.9	1,409.1
1966	18,692.4	1,169.7	377.7	2,162.5	3,512.1	1,397.1	3,960.6	222.6	1,925.9	2,629.8	1,522.5
1967	19,270.1	1,100.9	482.5	2,229.3	3,806.7	1,444.7	3,972.3	233.5	2,017.6	2,697.8	1,573.9
1968	20,493.8	1,172.6	434.3	2,342.9	3,915.4	1,583.7	4,341.5	252.2	2,102.4	2,878.2	1,698.5
1969	21,664.1	1,149.1	446.5	2,512.0	4,484.0	1,686.7	4,413.5	259.0	2,211.4	2,985.6	1,771.0
1970	21,591.5	1,154.4	456.0	2,566.4	4,055.4	1,751.5	4,320.8	296.6	2,301.5	3,079.1	1,866.6
1971	22,485.8	1,286.4	448.7	2,747.2	4,007.0	1,771.2	4,539.1	266.0	2,375.2	3,314.0	1,964.8
1972	24,279.2	1,514.9	468.2	2,973.0	3,805.2	1,866.5	5,261.1	286.5	2,585.9	3,617.8	2,129.3
1973	25,908.4	1,497.3	394.9	3,257.7	3,683.6	2,038.5	5,779.6	287.7	2,772.8	3,952.5	2,315.0
1974	26,334.9	1,369.8	416.0	3,412.0	3,699.4	2,175.5	5,844.9	316.0	2,905.3	3,906.4	2,329.1
1975	25,743.1	1,214.3	458.5	3,412.9	3,664.9	2,289.9	5,216.2	301.9	2,989.8	4,008.9	2,365.4
1976	27,584.6	1,296.1	450.3	3,546.1	3,620.2	2,345.2	6,163.5	296.1	3,206.9	4,265.2	2,521.8
1977	29,237.7	1,326.4	440.7	3,920.9	3,924.1	2,351.6	6,519.8	320.9	3,410.1	4,453.4	2,649.1
1978	30,554.4	1,375.6	500.8	4,116.0	4,020.0	2,464.7	6,802.3	283.8	3,590.1	4,699.0	2,767.0
1979	31,750.9	1,370.9	464.4	4,248.2	4,039.6	2,564.7	7,152.6	341.6	3,792.7	4,830.2	2,873.7
1980	32,108.7	1,187.8	436.4	4,233.7	4,187.2	2,621.7	7,304.9	364.7	3,970.3	4,851.6	2,904.1
1981	33,736.4	1,130.1	609.6	4,257.9	4,402.0	2,663.0	7,864.9	371.7	4,343.4	5,120.4	3,088.2
1982	34,246.5	1,076.7	569.8	4,624.8	4,533.1	2,646.0	7,670.0	352.2	4,530.4	5,210.1	3,139.1
1983	35,992.0	1,206.4	500.5	4,478.4	4,584.6	2,639.5	8,388.0	322.7	4,782.2	5,680.6	3,417.7
1984	38,854.7	1,392.0	534.9	4,845.3	4,654.8	2,622.1	9,241.4	385.5	5,140.9	6,343.5	3,783.9

Sources: The sources cited in Table 1; U.S. Department of Agriculture, Crop Reporting Board, Statistical Reporting Service, Agricultural Prices, 1984 Summary (Washington: GPO, 1985), p. 7 and earlier summaries; U.S. Deparment of Agriculture, Agricultural Statistics, 1976 (Washington: GPO, 1977), p. 457.

[a]Includes agricultural services, forestry and fisheries, and "rest of the world", which includes operations of foreign governments and international organizations in the United States.

Table 3.
Percentage Distribution of Virginia Gross State Product, 1958-1984 (current dollars)

Year	Total	Construction	Farming	Finance, Insurance, and Real Estate	Federal Government	State and Local Government	Manufacturing	Mining	Services	Trade	Transportation and Public Utilities
1958	100.0%	4.8%	4.7%	11.5%	15.6%	5.2%	23.2%	1.4%	10.0%	14.2%	9.5%
1959	100.0	4.7	3.7	11.5	15.4	5.2	24.0	1.3	10.1	14.5	9.6
1960	100.0	4.7	3.9	11.8	14.4	5.5	23.9	1.3	10.3	14.6	9.7
1961	100.0	4.9	3.7	11.9	14.4	5.7	23.6	1.2	10.4	14.5	9.5
1962	100.0	5.1	3.5	11.9	14.1	5.8	24.2	1.2	10.5	14.5	9.3
1963	100.0	5.4	2.5	12.3	14.8	5.9	23.8	1.2	10.6	14.3	9.2
1964	100.0	5.4	2.9	12.0	14.8	6.0	23.7	1.2	10.7	14.4	8.9
1965	100.0	5.6	2.7	12.1	14.2	6.2	23.9	1.1	10.7	14.5	8.9
1966	100.0	5.4	2.2	12.1	14.9	6.5	23.8	1.1	10.8	14.3	8.9
1967	100.0	5.1	2.3	12.1	15.6	6.7	22.9	1.1	11.0	14.4	8.7
1968	100.0	5.0	2.0	11.8	16.0	7.1	23.3	1.0	10.9	14.4	8.5
1969	100.0	5.1	2.0	11.7	17.5	7.3	21.9	1.0	10.9	14.4	8.2
1970	100.0	5.3	1.9	11.8	16.5	7.7	20.9	1.4	11.3	14.6	8.5
1971	100.0	5.4	1.8	12.1	16.3	7.6	20.7	1.2	11.4	14.9	8.6
1972	100.0	6.1	1.9	12.0	15.4	7.5	21.3	1.2	11.4	14.6	8.6
1973	100.0	6.0	2.3	12.3	14.0	7.9	20.9	1.2	11.8	14.9	8.6
1974	100.0	5.8	2.0	12.2	13.7	8.1	20.9	2.1	12.1	14.8	8.4
1975	100.0	5.4	1.8	12.0	13.7	8.6	19.7	2.2	12.5	15.5	8.6
1976	100.0	5.1	1.6	11.7	13.0	8.4	21.5	1.8	12.8	15.2	8.8
1977	100.0	5.0	1.3	12.5	13.2	8.1	21.5	1.8	12.9	14.9	8.7
1978	100.0	5.1	1.7	12.9	12.9	8.0	21.2	1.6	13.2	14.9	8.5
1979	100.0	5.3	1.6	12.8	12.5	8.0	21.2	1.7	13.8	14.9	8.3
1980	100.0	4.8	1.2	12.6	12.7	8.0	21.3	1.7	14.2	14.8	8.5
1981	100.0	4.3	1.6	12.1	12.8	7.7	21.7	1.7	14.7	14.7	8.7
1982	100.0	3.9	1.2	13.0	13.3	7.7	20.5	1.6	15.2	14.5	9.1
1983	100.0	4.1	1.0	12.4	12.8	7.6	21.0	1.2	15.6	14.8	9.5
1984	100.0	4.3	1.0	12.6	12.2	7.2	21.1	1.4	15.5	14.9	9.9

Source: Table 1.

Table 4.
Virginia GSP Per Capita and GNP Per Capita, 1958-1984
(current and 1972 dollars)

	Current Dollars			1972 Dollars		
Year	Virginia Per Capita	U.S. Per Capita	Virginia as a % of U.S.	Virginia Per Capita	U.S. Per Capita	Virginia as a % of U.S.
1958	$ 2,081	$ 2,582	80.6%	$3,201	$3,907	81.9%
1959	2,231	2,755	81.0	3,372	4,075	82.8
1960	2,267	2,815	80.5	3,355	4,097	81.9
1961	2,304	2,867	80.4	3,381	4,136	81.7
1962	2,442	3,042	80.3	3,524	4,309	81.8
1963	2,563	3,167	80.9	3,680	4,418	83.3
1964	2,767	3,338	82.9	3,848	4,587	83.9
1965	2,945	3,572	82.4	4,005	4,804	83.4
1966	3,170	3,867	82.0	4,195	5,038	83.3
1967	3,357	4,051	82.9	4,275	5,125	83.4
1968	3,700	4,382	84.4	4,496	5,309	84.7
1969	4,051	4,690	86.4	4,695	5,403	86.9
1970	4,276	4,871	87.8	4,633	5,327	87.0
1971	4,595	5,210	88.2	4,731	5,427	87.2
1972	5,126	5,667	90.5	5,029	5,667	88.7
1973	5,641	6,276	89.9	5,280	5,935	89.0
1974	6,149	6,723	91.5	5,290	5,842	90.6
1975	6,477	7,190	90.1	5,091	5,716	89.1
1976	7,208	7,897	91.3	5,374	5,967	90.1
1977	7,987	8,729	91.5	5,424	6,233	87.0
1978	8,827	9,743	90.6	5,782	6,477	89.3
1979	9,735	10,766	90.4	5,963	6,588	90.3
1980	10,576	11,585	91.3	5,989	6,493	92.2
1981	11,951	12,887	92.7	6,206	6,588	94.2
1982	12,805	13,242	96.7	6,244	6,385	97.8
1983	13,911	14,122	98.5	6,478	6,558	98.8
1984	15,428	15,510	99.5	6,894	6,942	99.3

Source: Tables 1 and 2 and unpublished July 1st population estimates from the U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Measurement Division.

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